

REMARKS

1. In response to the final Office Action mailed September 27, 2007, Applicants respectfully request reconsideration. Claims 1-8 and 10-17 were last presented for examination. Claims 18-75 were previously withdrawn and claims 1-8 and 10-17 were rejected. By the foregoing Amendments, claims 1-8, and 10-17 have been amended, and no claims have been canceled or added. Thus, upon entry of this paper, claims 1-8 and 10-75 will remain pending in this application. Of these seventy-four (74) claims, seven (7) claims (claims 1, 18, 35, 43, 52, 54 and 55) are independent.

2. Based on the above Amendments and following Remarks, Applicants respectfully request that all outstanding objections and rejections be reconsidered, and that they be withdrawn.

Claim Rejections

3. In the outstanding Office Action, claims 1-8 and 10-17 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,617,872 to Vogley (hereinafter, "Vogley") in view of U.S Patent Application Publication No. 2003/0130969 to Hawkins *et al.*, (hereinafter, "Hawkins").

4. The Examiner asserts that Vogley substantially teaches all elements of Applicants' invention as recited in claim 1. The Examiner recognizes that Vogley fails to teach "a baseboard management controller (BMC)" as recited in Applicants' claim 1. The Examiner relies instead on Hawkins to teach this limitation. The Examiner then asserts that it would have been obvious to incorporate the alleged BMC of Hawkins into Vogley because "adding a baseboard management controller would have allowed the skilled artisan to provide intelligence to the platform management as well as managing the interface between system management software and the platform management hardware." This, the Examiner asserts, would provide alleged benefits. (*See*, Office Action, page 3.)

5. For the reasons set out below, Applicants respectfully assert that the above combination of references fail to teach or suggest all elements of Applicants' claim 1. Applicants further assert that the Examiner has failed to provide a sufficient basis supporting the assertion that one of ordinary skill in the art would be motivated to combine Vogley with Hawkins as suggested.

Failure of References to Teach or Suggest All Elements of Applicants' Claim 1

6. Conventional devices exist to margin test components of an electrical system. (*See*, Applicants' Published Application, page 1, paras. [0005]-[0008].) Margin testing with such a conventional device requires that the electrical system being tested referred to as SUT, be connected to a physically separate and independent external testing system. (*See*, Applicants' Published Application, page 1, paras. [0005]-[0008].) The external testing system comprises all hardware and/or software required to run the margin tests of the SUT. (*See*, Applicants' Published Application, page 1, paras. [0005]-[0008].) Because a conventional external margin testing system was designed to test many SUTs, the system was physically separate and independent from the SUT. (*See*, Applicants' Published Application, page 1, paras. [0005]-[0008].)

7. Vogley is directed to such a conventional external testing system. Vogley discloses an integrated circuit (IC) testing device having test sockets that are each configured to receive one or more ICs to be margin tested. (*See*, Vogley, col. 2 lines 56-67.) At least one microprocessor is connected to each test socket. (*See*, Vogley, col. 2 lines 24-35.) A personal computer or workstation is included in the system for controlling the microprocessors and the testing of the ICs. (*See*, Vogley, col. 3, lines 17-32.)

8. An operator initiates the test procedure of an IC at the personal computer. (*See*, Vogley, col. 3, lines 44-53.) During such a test, the personal computer delivers a test algorithm to a microprocessor and the test algorithm is loaded into the microprocessor. (*See*, Vogley, col. 3, lines 17-43.) The microprocessor then uses the loaded test algorithm to perform a test on an IC via a test socket having the IC therein. (*See*, Vogley, col. 3, line 54- col. 4, line 51.) The test may include a power test, a functionality test, a timing test, *etc.* (*See*, Vogley, col. 3, lines 33-43.) The type of test performed depends on the testing algorithm provided to the microprocessor by the personal computer. (*See*, Vogley, col. 3, lines 17-43.)

9. Referring next to Hawkins, Applicants assert that Hawkins is directed to a computing system topology. Specifically, Hawkins is directed to a system having a star Intelligent Platform Management Bus ("IPMB") topology. (*See*, Hawkins, col. 1, para. [0002].) The computing system is designed such that that a central Baseboard Management Controller ("BMC") uses

independent intelligent platform management buses to communicate with various satellite management controllers ("SMCs"). (*See*, Hawkins, col. 1, para. [0002].) The BMC is used to "monitor baseboard temperature and voltages and to manage the system event log and... manages the interface between the system management software and the platform management hardware." (*See*, Hawkins, col. 1, para. [0007].)

10. As noted above, the Examiner has asserted that the combination of Vogley and Hawkins teaches all elements of Applicants' amended claim 1. In the Office Action, the Examiner asserts that the personal computer of Vogley teaches "a host controller" as recited, in part, in claim 1. (*See*, Office Action, page 7.) The Examiner further asserts that each microprocessor of Vogley teaches "a margin testing system" as recited, in part, in claim 1. (*See*, Office Action, page 7.) Furthermore, in the previous Office Action mailed June 14, 2007, the Examiner asserted that the ICs connected to the test sockets of Vogley teach "a plurality of components configured to provide functionality for the electronic system," as recited, in part, in claim 1. (*See*, previous Office Action mailed 7/14/2007, page 7.) As noted, the Examiner relies on Hawkins to teach "a baseboard management controller (BMC)" as recited, in part, in claim 1.

11. Applicants respectfully disagree with the Examiner's assertions. However, even if the Examiner's above assertions were correct, Applicants assert that the combination of Vogley and Hawkins would still fail to teach or suggest all elements of Applicants' amended claim 1. In particular, Applicants assert that the independent ICs, personal computer, and microprocessors of Vogley fail to teach or suggest "[a]n integrated electrical system comprising... a margin testing system *integrated with* said host controller and said plurality of components, said testing system configured for margin testing one or more of said plurality of components" as recited, in part, in Applicants' claim 1. (Emphasis added.)

12. As noted above, in the device of Vogley an IC is connected to a test socket for a short period of time so that a series of margin tests may be performed on the IC. (*See*, Vogley, col. 2 lines 24-35.) The personal computer sends testing algorithms to a microprocessor, and the microprocessor implements the testing algorithm to perform the margin test of the IC. (*See*, Vogley, col. 4, lines 44-47.) Once the margin tests have been completed, the IC is removed for installation into a separate computer system. (*See*, Vogley, col. 1, line 59- col. 2, line 2.) In

other words, the IC of Vogley merely comprises a SUT that is connected to a test socket, subjected to margin testing, and then disconnected from the testing system. Applicants assert that such an IC is not integrated with the testing system of Vogley, let alone with the microprocessor and personal computer. As such, Applicants assert that it is unreasonable to interpret the temporarily connected IC, microprocessor and personal computer of Vogley as “integrated with” one another.

13. Applicants further assert that Hawkins fails to teach or suggest that which is missing from Vogley. As noted above, Hawkins merely discloses a computer system that uses independent intelligent platform management buses between a central Baseboard Management Controller ("BMC") and various satellite management controllers ("SMCs"). (*See*, Hawkins, col. 1, para. [0002].) Hawkins completely fails to teach or suggest any other elements that are even remotely related to the present invention.

14. Therefore, for at least the above reasons, Applicants assert that the combination of Vogley and Hawkins fails to teach or suggest the above elements of Applicants' claim 1, including an “integrated electrical system comprising: a host controller configured to execute an operating system and one or more management agents; a plurality of components configured to provide functionality for the electronic system; and ***a margin testing system integrated with said host controller and said plurality of components, said testing system configured for margin testing one or more of said plurality of component.***” As such, Applicants respectfully submit that the rejections under 35 U.S.C. §103(a) be reconsidered, and that they be withdrawn.

The Combination of Vogley with Hawkins is prima facie Improper

15. The rejection of claim 1 is *prima facie* improper because it provides no appropriate basis for combining Vogley with Hawkins. As set forth in the Manual of Patent Examining Procedure (MPEP) at § 706.02(j), “[t]o establish a *prima facie* case of obviousness . . . there must be some suggestion or motivation, ***either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings*** (emphasis added) . . . The teaching or suggestion to make the claimed combination and the reasonable expectation of success ***must both be found in the prior art and not based on***

applicant's disclosure (emphasis added). *In re Vaeck*, 947 F.2d. 488, 20 USPQ2d 1438 (Fed. Cir. 1991).”

16. In the rejection of claim 1, the Examiner asserts several possible reasons to explain why one of ordinary skill in the art would have been motivated to modify the teachings of Vogley to include the BMC of Hawkins. Specifically, the Examiner asserts that:

“[i]t would have been obvious at the time the invention was made to one of ordinary skill in the art to modify Vogley to include the teachings of Hakens because adding a baseboard management controller would have allowed the skilled artisan to provide intelligence to the platform management as well as managing the interface between system management software and the platform management hardware, providing autonomous monitoring, event logging, and recovery control and serves as the gateway between system management software and a management bus. (See, Office Action, pages 3-4.)

17. The Examiner has lifted this alleged basis for making the combination proposed by the Examiner from para. [0007] of Hawkins in which the functions of the BMC are described. Applicants assert that this alleged motivation is insufficient.

18. As held by the Federal Circuit in *In re Lee*, 61 USPQ2d 1430, 1433 (Fed. Cir. 2002), specific reasons must be shown in the art suggesting a combination of references. (See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (“[P]articular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.”); Also see, *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998) (“[E]ven when the level of skill in the art is high, the Board must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination.”)).

19. Applicants respectfully submit that the Examiner has failed to meet the above burden in the §103 rejection of claim 1. Applicants assert that there would be no advantages to adding a BMC to the system of Vogley, as suggested by the Examiner, because the personal computer of Vogley is already capable of performing the functions that would be allegedly added by the BMC of Hawkins. The personal computer of Vogley already adds “intelligence to the platform management” as well as manages “the interface between system management software and the

platform management hardware.” As discussed above, not only is the personal computer configured to receive user inputs to control the entire testing system, but the personal computer is further configured to manage the tests that are to be applied to an IC. (*See*, Vogley, col. 3, line 7- col. 4, line 51.) Therefore, because the personal computer of Vogley is more than capable of performing the functions that the Examiner alleges would be added by incorporating the BMC of Hawkins into Vogley, Applicants assert that one of ordinary skill in the art would not be motivated to make the combination suggested by the Examiner. As such, Applicants assert that the rejection of claim 1 is *prima facie* improper and should be withdrawn.

Dependent Claims

20. The dependent claims incorporate all of the subject matter of their respective independent claims and add additional subject matter which makes them *a fortiori* independently patentable over the art of record. Accordingly, Applicants respectfully request that the outstanding rejections of the dependent claims be reconsidered and withdrawn.

Conclusion

21. In view of the foregoing, Applicants respectfully submit that this application is now in condition for allowance. A notice to his effect is respectfully requested.

22. Applicants reserve the right to pursue any cancelled claims or other subject matter disclosed in this application in a continuation or divisional application. Thus, cancellations and amendments of above claims, are not to be construed as an admission regarding the patentability of any claims.

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Respectfully submitted,

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